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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/778,558 | 02/07/2001 | Pang-Chia Lu | 10251 | 4395 |

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EXAMINER

DICUS, TAMRA

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,558

Applicant(s)

LU ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. Request of Continuing Examination is acknowledged.
2. The 103(a) rejection over Newberry et al., USPN 6,087,079 in view of Schleinz et al., USPN 5,458,590 is maintained and in a prior office action dated Nov. 4, 2002, Paper No. 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PUBLICATION 2001/0016248 A1 to Alderfer et al. in view of USPN 6,379,780 to Laney et al.

Alderfer teaches a printing sheet comprising an extruded microporous film having a meshed network of interconnecting porous from 35 to 95 percent void volume (content) containing HDPE at [0003]-[0005]. The sheet has a coating on it and comprises calcium carbonate joined to at least one side of the microporous material at [003], [0022], [0024], and [0051]. The sheet is suited for ink jet printing, which means the method for applying ink to such a sheet is taught. See [0002]. That the film is porous from one surface to the other surface is inherent to a microporous sheet.

That the film is treated with plasma is a process limitation in a product claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure

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implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F. 2d 531.

Alderfer does not teach per se the interconnecting voids have “an open celled structure”. However, Laney teaches a permeable surface imaging support containing microbeads with a void space of at least 40% having interconnected or open-celled structure at col. 11, lines 6-13 for the purpose of providing improved ink absorption (same reason as Applicant). Hence, it would have been obvious to one of ordinary skill in the art to modify the sheet of Alderfer to include open cells in voids for the purpose of improving ink absorption as taught by Laney.

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,087,079 to Newberry et al. in view of USPN 5,458,590 to Schleinz et al. and USPN 6,379,780 to Laney.

5. Newberry shows a photographic imaging element comprising a paper substrate and at least two extruded biaxially oriented HDPE sheets which comprise a core layer, surface layer, and skin layers (core, extruded and skin layers) (claim 6 and Abstract). Newberry further shows an image layer (coating layer) comprising gelatin and PVA which is coated on the imaging element (col. 13, lines 5-26). Newberry shows that calcium carbonate particles are added to the layers of the imaging element (col. 5, line 30 – col. 6, line 20). Newberry shows that the sheets are treated with plasma to improve printability or adhesion (col. 6, lines 53-63). Newberry shows voids (pores) in the HDPE sheets wherein the voids are oriented so that there is alignment

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with the machine and transverse and machine directions of the sheet (col. 4, lines 20-37), which is equivalent to the voids being porous in a direction perpendicular to the plane of the film the film is porous from one surface to the other surface and is in a direction perpendicular to the plane of the film. Newberry further shows a nonvoided skin layer (nonporous) at col. 5, lines 66-67. Newberry shows that ink can be applied to the imaging element via ink jet printing (col. 13, lines 5-25).

While Newberry teaches voids are generally closed celled, Newberry does not say that voids could not be open celled. Nevertheless, Laney teaches a permeable surface imaging support containing microbeads in an ink receiving layer with a void space of at least 40% having interconnected or open-celled structure at col. 11, lines 6-13 for the purpose of providing improved ink absorption (same reason as Applicant). Hence, it would have been obvious to one of ordinary skill in the art to modify the sheet of Newberry to include open cells in voids for the purpose of improving ink absorption as taught by Laney.

6. That the film is treated with plasma is a process limitation in a product claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F. 2d 531. Moreover, Newberry shows the process of treating the sheet with a plasma treatment.

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7. Newberry does not show HDPE fibers in the imaging element as in instant claims 1 and 6. Schleinz shows an ink-printed fibrous laminate web comprising fibers of HDPE which are extruded into films (col. 7, line 18-col. 8, line 9). Schleinz further shows that the laminate web is printed with water-based ink jet printing ink (col. 4, lines 58-65) (claim 10). Thus, it would have been obvious to one of ordinary skill in the art to include the HDPE fibers in the layers of Newberry because it is known, as shown by Schleinz, that HDPE fibers are useful for its mechanical and chemical strength and good printing characteristics for use with water-based ink jet printing (col. 4, lines 58-65).
8. Regarding claim 3, that the film is laminated "on an outer surface of the film opposite said coating layer (b)," Newberry shows that the arrangement of the lamination is substrate/extruded film layer/coating layer (Abstract and claim 6).

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Newberry and Schleinz are still relied upon because they both are directed to HDPE films/webs for ink jet printing. That Newberry generally states voids have closed cells, doesn't mean voids all have closed cells. Laney is used to show voids can in fact have open cells to improve ink absorptivity, not Schleinz, which solves the same problem as Applicant.

In response to applicant's argument that Schleinz prints on a different layer, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tamra L. Dicus
Examiner
Art Unit 1774

May 14, 2003


DEBORAH JONES
SUPERVISORY PATENT EXAMINER